# Year 2000 and 2001 Priority Actions

## Reduce Impacts of Salt on Soils and Receiving Water During High Flow - 7

1. General Description of the Action

Reduce salt loading of soils during high flow periods in the San Joaquin River.

Salinity in the soils increases with brackish irrigation water and limited leaching with low TDS water. Evaporation coupled with sparse irrigation with higher TDS irrigation water can lead to salt buildup in soils. Too much salt renders the soil useless. Soils are therefore leached by applying excess irrigation water (more than necessary for crop production) to dissolve the salts and discharge salt in tail water or drain water.

Leaching of soils during low flow periods causes marked increases in receiving waters, lowering the utility of the receiving water.

Restricting the leaching process to periods of high flow, taking advantage of the assimilative capacity of the receiving streams could accomplish the reduction of salt in the soils while simultaneously minimizing salt concentrations in the river during low flow periods. The mass load of salt will probably not change using this method, however, impacts would be reduced.

Initial evaluation of this method as well as studies are proposed. Our goal is to develop a salt management method with the lowest impacts.

2. Cost Estimates

Evaluation costs will be low in comparison to study costs. The estimated cost for this evaluation would be less than $100,000 per year. The primary expenditures will be for staff time in researching scenarios of discharge during different water year types.

3. Program Administration and Governance

The CALFED Water Quality Program should oversee the scope of the evaluation methods and preparation of the final reports. The Regional Water Quality Control Board or the USDA Natural Resources Conservation Service should administer the contracts and possibly conduct the evaluation.

4. Program Coordination

The Regional Water Quality Control Board and the Department of Water Resources, Department of Food and Agriculture, US Bureau of Reclamation, and US Geological Survey have staff and data that would be used in this evaluation. The local irrigation districts should be allowed to participate in the program design and implementation. This would coordinate well with other efforts they have made in recent years.